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# An Indigenous Measure of Social Desirability Across Non-Western Countries

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# **An Indigenous Measure of Social Desirability Across Non-Western Countries**

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## **Abstract**

Cross-cultural differences in Social Desirability (SD) could be partly due to the nonequivalence of constructs, items, or other challenges of cross-cultural research. We tested to what extent a Mexican, indigenous scale of SD, capturing both positive and negative features of SD, would be useful in other countries. Data were collected in convenience samples in eight countries (Argentina, China, Colombia, Costa Rica, Lebanon, Mexico, Nicaragua, and Spain) in order to test the psychometric accuracy and invariance of the factor structure. Values of Tucker's factor congruence coefficients (gauging invariance) and tests of the similarity of the cross-country similarity of Cronbach's alpha (gauging internal consistency) revealed that SD, as measured by this indigenous list, is stable and comparable across cultures. The results are interpreted in a conceptual framework in which SD is viewed as a culturally embedded communication style that people use to integrate successfully into their groups.

*Keywords:* Social Desirability, communication style, Tucker's Phi, fitting in

## **An Indigenous Measure of Social Desirability across Non-Western Countries**

There is considerable evidence that social desirability (SD) can be considered part of the core structure of personality (e.g., Acosta & Dominguez, 2012, 2014; Paulhus, 2002; Paulhus & John, 1998; Uziel, 2010). SD has two components: denial of negative, undesirable attributes/behaviors/characteristics; and the endorsement of positive- desirable attributes/behaviors. SD is based on the premise that individuals make an effort to portray themselves favorably, enhancing his skills, prowess, and social values to avoid social disapproval (Acosta & Dominguez, 2012; Dominguez & Van de Vijver, 2014; Lalwani, Shrum, & Chiu, 2009; Paulhus, 1984, 2002). In this line of reasoning, SD is not a manifestation of a deliberately distorted self-presentation (in line with the idea that SD refers to lying; Eysenck & Eysenck, 1963), but reflects the tendency to manage one's self-image within social contexts and demands in order to adapt in a favorable way. Various authors consider SD part of a communication filter that people use to express themselves, enabling any individual to fit in by enhancing personality traits that deal with collectivism, agreeableness, affiliation, integration, closeness, and personality traits deemed relevant for a specific cultural context (He, Van de Vijver, Domínguez, & Mui, 2014; He & Van de Vijver, 2013; Smith, 2004).

Extant cross-cultural SD research has two shortcomings in our view. Firstly, issues of cross-cultural comparability (Van de Vijver & Leung, 2000) are infrequently addressed. Some findings on cross-cultural differences of SD (Dudley, McFarland, Goodman, Hunt, & Sydel, 2005; Hough, 1998) could be partly or entirely due to nonequivalence of items or other challenges of cross-cultural comparability. Secondly, cross-cultural research uses predominantly Western instruments that are usually applied in other countries without adequately considering the cultural appropriateness of the instruments. We set out to address both shortcomings by including invariance issues in our study and by employing an instrument that was developed from an emic perspective, aimed to address SD in the Mexican population (Dominguez & Van de Vijver, 2014). The scale captured similar items to those used in Western scales, as well as more culture-specific ones referring to content particularly prominent among Mexicans. The scale uses a two-dimensional conceptualization of SD (cf. Dominguez, Procidano, & He, 2012), comprising behaviors that are either positive (desirable; e.g., unconditional love, forgiveness, altruism, kindness, loyalty) or negative (undesirable; e.g., bribery, speaking ill of friends, and lying). This two-dimension solution is like previous findings where SD is split in attribution (positive) and denial (negative) dimensions (Gravdal & Sandal, 2006; Paulhus & Reid, 1991; Pauls, Wacker, & Crost, 2005; Ramanaiah & Martin, 1980).

The link between culture and SD has been discussed by several authors (e.g., Crowne & Marlowe, 1964; Edwards & Riordan, 1994; Johnson & Van de Vijver, 2002; Keillor, Owens, & Pettijohn, 2001). Yet, a more precise delineation of which cultural aspects are involved is still missing. It has been argued that cross-cultural SD differences may be linked to cultural value systems such as individualism and collectivism. According to Johnson (1998), there

is some evidence that social desirability scores may be higher in collectivistic societies, which is consistent with other evidence (Jones, 1983), suggesting that cultural emphasis on certain modes of social interaction may encourage the production of socially desirable information in order to maintain a positive and harmonious relationship with their social group. The need for affiliation, conformity, approval, and lack of self-disclosure are closely related to SD. In the same line, collectivism is associated with a greater emphasis on interpersonal harmony and with less emphasis on individual opinions, and more yielding to social pressure (Chen et al., 2001; Hofstede, 2001).

For the present study, we considered a total of eight countries that show quite some variation in collectivism (Hofstede's Individualism-Collectivism scores are shown in parentheses; the scores can range between 0 and 100, with 50 as a midpoint): Argentina (46), China (20), Colombia (13), Costa Rica (15), Lebanon (40), Mexico (30), Nicaragua (unknown), and Spain (51). According to the Hofstede Centre (Hofstede, Hofstede, & Minkov, 2010), scores below 50 are indicative of "collectivism" and above 50 of "individualism." Scores for Nicaragua are not reported by the Hofstede Centre, but scores for the two neighboring countries (Costa Rica and Honduras) are. As Nicaragua is located in an overall collectivist region, we assume that it qualifies as a collectivist country.

The present study had the following aims: 1) to gather additional information about the Indigenous Social Desirability Scale stability and its use in Latin-American and non-Western countries to test hypotheses on cultural differences, therefore providing evidence about the universality of the two-dimensional SD structure; 2) to compare country mean differences in the two SD dimensions. We expect more similarities across Latin American countries (Argentina, Colombia, Costa Rica, Mexico, and Nicaragua) when compared to non-Latin American countries in this sample (China, Lebanon, and Spain), as they share common characteristics and historical backgrounds (e.g., Spanish as an official language, a shared colonization experience, etc.). Even with the aforementioned difference, all of these countries still belong to the collectivistic group except for Spain, which has the highest score on individualism for this sample according to Hofstede's scale (Hofstede, 2001); thus we expect differences in social desirability between all these countries and Spain.

## Method

### Participants

A total convenience sample of 2,811 participants came from Argentina ( $n = 165$ ), China ( $n = 445$ ), Colombia ( $n = 201$ ), Costa Rica ( $n = 253$ ), Lebanon ( $n = 282$ ), Mexico ( $n = 654$ ), Nicaragua ( $n = 281$ ), and Spain ( $n = 539$ ). Mean age for the total sample was 26.08 years ( $SD = 11.85$  years), and 49.9% of the sample was female. All respondents agreed to participate on a voluntary basis.

## Instrument and Procedure

The Indigenous Social Desirability Scale (ISDS; Dominguez & Van de Vijver, 2014) consists of 14 items on a five-point Likert scale (1 - *Totally Disagree*, 5 - *Totally Agree*). The scale assesses positive (six items, e.g., “I easily forgive those who offend me”) and negative (eight items, e.g., “I lie if I know I won’t be discovered”) aspects of SD. In a previous study, the scale showed adequate fit indexes for the two-factor solution ( $N = 1,227$ ; RMSEA = .05, GFI = .96, AGFI = .95, TLI = .90). The original version was applied in Spanish to all Latin-American countries and Spain, and an English version for Lebanon was created using the translation-back translation method proposed by Brislin (1970). The English version was translated into Chinese by also using Brislin’s procedure. A paper-pencil procedure was used in China, Colombia, Costa Rica, Lebanon, Mexico, Nicaragua, and Spain, while 30% of the Argentinian sample was collected through e-mail snowballing sampling. No monetary compensation was given to any of the participants, and confidentiality was ensured for all cases.

Table 1

*Test of Independent Alphas and Cronbach’s Alpha Values for Each Country on Both Dimensions of SD*

	Cronbach’s alpha		Comparison of Mexico with	Test of independent alphas			
	SD-P	SD-N		SD-P		SD-N	
				$\chi^2(1)$	$p$	$\chi^2(1)$	$p$
Argentina	.72	.79	Argentina	.14	.70	4.06	.04
China	.76	.69	China	1.12	.28	47.17	.00
Colombia	.85	.79	Colombia	15.54	.00	4.41	.03
Costa Rica	.75	.73	Costa Rica	.36	.54	21.38	.00
Lebanon	.72	.75	Lebanon	.19	.65	16.12	.00
Mexico	.74	.84					
Nicaragua	.70	.80	Nicaragua	.95	.32	4.36	.03
Spain	.93	.75	Spain	174.54	.00	27.02	.00
Total	.86	.78					

Notes. SD-P: Social desirability, positive scale. SD-N: Social desirability, negative scale.



## Results

Table 1 displays Cronbach's alpha coefficients for each SD dimension for each country, indicating that the reliability coefficients were adequate. Positive SD seems to be stable in each country. Interestingly, the only value below .70 was obtained in China for the Negative dimension ( $\alpha = .69$ ). All other values ranged between .70 and .93. Table 1 also shows the tests of identity of independent Cronbach's alphas when comparing scores for each country against Mexico. Since this was the country for which the scale was originally developed, Mexico was considered the comparison standard. Statistically significant differences arose when comparing Mexico with Colombia and Spain on Positive SD, and when comparing with China, Costa Rica, Lebanon, and Spain on Negative SD. The significant differences found were not clearly patterned, leading to the conclusion that, although there were several significant differences, these were not systematic deviances of the Mexican values. Country correlations between the positive and negative dimensions were as follows: Argentina  $r(154) = -.03$ ,  $p = .71$ ; China  $r(443) = .07$ ,  $p = .13$ ; Colombia  $r(199) = .07$ ,  $p = .31$ ; Costa Rica  $r(160) = .22$ ,  $p = .01$ ; Lebanon  $r(280) = .11$ ,  $p = .06$ ; Mexico  $r(652) = .03$ ,  $p = .35$ ; Nicaragua  $r(279) = .01$ ,  $p = .35$ ; Spain  $r(536) = .07$ ,  $p = .09$ . These results suggest that the dimensions are orthogonal as they run from non-significant to small significant correlations.

Table 2 shows Tucker's congruence coefficients obtained when a pool solution with the whole sample ( $N = 2,811$ ) is compared with the exploratory factor analysis obtained per sample. The Positive dimension obtained values that ranged between .98 and 1, while results on the Negative dimension ranged from .93 and .99. These data provide strong evidence of structural equivalence for the Indigenous Social Desirability Scale as this procedure has been used previously in cross cultural research (Fontaine, Duriez, Luyten, & Hutsebaut, 2003; Motti-Stefanidi, Pavlopoulos, Obradović, & Masten, 2008; Van de Vijver & Leung, 2000; Van de Vijver & Watkins, 2006).

Table 2  
*Tucker's Congruence Coefficients*

	Social Desirability	
	Positive Scale	Negative Scale
Argentina	.98	.93
China	.97	.97
Colombia	.99	.97
Costa Rica	.98	.99
Lebanon	1.00	.99
Nicaragua	.99	.98
Spain	.99	.98

To test item bias, ANOVAs were conducted to test uniform and non-uniform bias. The results showed statistically significant differences with small effects (all  $\eta^2 > .04$ ) in two items in the positive dimension and one in the negative dimension, pointing to uniform bias.

After the deletion of those two items, mean scores were compared across countries in a MANOVA with country as the independent variable. As seen in Table 3, significant differences were found across countries in both dimensions of SD. China had the highest ranking score in Positive SD, while Spain had the lowest. On the Negative dimension, China ranked as the lowest score and Colombia is the highest. As observed in Table 3, the effect was larger in the Negative dimension of SD. Moreover, specific contrasts between Latin American countries vs. Spain and Lebanon yielded significant differences but small effects ( $\eta^2 \leq .05$ ).

Table 3  
*Mean Comparisons Across Countries*

Country	SD-Positive			SD-Negative		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Argentina	2.79	.80	156	3.89	.66	156
China	3.12	.79	445	3.49	.63	445
Colombia	2.84	1.28	201	4.01	.69	196
Costa Rica	2.84	.83	252	3.88	.64	247
Lebanon	2.88	.88	282	3.86	.68	282
Mexico	2.88	.88	654	3.92	.79	652
Nicaragua	2.89	.97	281	3.68	.83	281
Spain	2.52	2.03	538	3.91	.66	510
	<i>F</i> (7, 2801)	9.03		<i>F</i> (7, 2761)	20.60	
	<i>p</i> <	.001		<i>p</i> <	.001	
	Contrast $\eta^2$	.02		Contrast $\eta^2$	.05	

## Discussion

The comparisons of Cronbach's alphas suggest that SD constitutes a rather stable personality trait, showing internal and cross-cultural consistency (Crowne & Marlowe, 1960; Dominguez & Van de Vijver, 2014; Ellingson, Smith, & Sackett, 2001; Lönnqvist, Verkasalo, & Bezmenova, 2007; Paulhus, 1984). Although reliability scores were adequate, the scale showed statistically significant differences across alpha scores, which could be due to the translation process. Despite language translation (Triandis, Bontempo, Leung, & Hui, 1990), our findings suggest that some core characteristics exist within the two-dimensional configuration that go beyond cultural limitations and manifest in a relatively stable fashion. Cultural consistency and construct bias (He & Van de Vijver, 2012) across countries were addressed with Tucker's congruence coefficient, which showed congruent coefficients within

the parameters proposed by Lorenzo-Seva and Ten Berge (2005) and Van de Vijver and Leung (1997, 2000), leading us to conclude that our definition of SD is stable across these cultures.

Despite the overall internal consistency and conceptual equivalence across countries, mean scores in SD turned out statistically different, probably because of China's scores, which were the highest and lowest in Positive SD and Negative SD, respectively. To our surprise, Lebanon did not differ statistically from the rest of the sample even though it is not a Latin American country. SD scores seem to be pointing out that people from China are the most worried about accepting socially desirable traits and the least worried about accepting socially undesirable traits. However, the scores could also point to another phenomenon. All countries in the study, except for China, are in regions that are known for their preference for extremity scoring in Likert scales (e.g., He & Van de Vijver, 2015). However, China often shows a tendency for modesty and midpoint responding. The pattern of means that we found in the comparison of China with the other countries is in line with this distinction between extreme and midpoint responding as Chinese are in both scales closer to the midpoint of the scale, as it has been observed previously (Lee, Jones, Mineyama, & Zhang, 2002).

Item bias, probably due to the translation procedure, could also be underlying the differences in SD scores, particularly when comparing China and Spain.

Interestingly, the scores from Lebanon were not as different as the Latin American countries, and they were all below China's score in Positive SD and over in Negative SD, probably due to the collectivist similarities that the Hofstede Centre reports (Hofstede et al., 2010). The individualist-collectivist continuum could also account for these differences considering that, according to Hofstede, the only true individualist country is Spain, which scored lowest on Positive SD and second highest on Negative SD. However, this may not account for all variability since Colombia, one of the most collectivist countries in the world, scored the highest. As Johnson (1998) and Ross and Mirowsky (1983) hypothesized, collectivist, Latin American countries seem to score higher than individualist ones, which is partially supported by our findings. Further research is needed in this area.

In our sample, all individuals seem to emphasize social interaction and social adaptation, congruent with their collectivist orientation according to Hofstede et al.'s (2010) standards. People seem to be maintaining positive and harmonious relationships with their social groups across cultures. Hofstede (2001) also suggested that motivations to achieve agreeableness and interpersonal harmony could be related to hierarchy and power distance. Hofstede (2001, 2011; Hofstede et al., 2010) and Chen et al. (2001) have noted that cultures high in power distance usually stress conformity and submissiveness, which could lead to behavior adaptation, impression management and strong endorsement of SD-related behaviors.

He et al. (2014) and Smith (2004) proposed SD as one of the core components of a general response style that people use to integrate successfully into groups, creating harmonious relationships that promote social acceptance and integration. This response style is influenced by cultural characteristics and, as the authors propose, it may be due not only to the desire of fitting in, as it presumably also manifests in various personality traits that may have not been considered in the present study.

The findings suggest that SD is likely a universal concept, given the similarities in ratings of SD in both Positive and Negative dimensions. This conclusion is remarkable, given that our measure was developed only to fit the Mexican context. Most items were found to be adequate across all cultural contexts. Much research in cross-cultural psychology employs Western instruments in a non-Western context without much consideration of the question of cultural adequacy of the instrument. We used the same procedure, but started from a non-Western instrument. It is interesting to note that our results are like many studies using Western instruments: the structure underlying the instruments is universal, but some items may need modification or adaptation. The procedure to use non-Western instruments has been advocated to inform Western psychology about its own cultural roots (Van de Vijver & Leung, 1997). We hope that our study provides impetus for conducting more studies using this template.

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